



**The Commonwealth of Massachusetts**  
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 Department of Public Health  
 Bureau of Health Care Safety and Quality  
**Medical Use of Marijuana Program**  
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**Title:** Protocol for Sampling and Analysis of Environmental Media for  
 Massachusetts Registered Medical Marijuana Dispensaries

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**Exhibit 5.**  
**Analysis Details – Water**

Method	Analytical Method	Analyte	CAS	Reporting Limit (mg/L)	Acceptable Limits (mg/L)
Metals	Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES) Comparable to SW-846 6010C or other suitable validated method or ICP-Mass Spectrometry (ICP-MS) comparable to SW-846 6020B or other suitable validated method and Cold Vapor Atomic Absorption (CVAA) for Mercury comparable to SW-846 7470A or other suitable validated method	Antimony	7440-36-0	0.060	6
		Arsenic	7440-38-2	0.010	10
		Cadmium	7440-43-9	0.005	5
		Chromium (Hexavalent)	7440-47-3	0.010	100
		Copper	7440-50-8	0.025	1,300
		Lead	7439-92-1	0.010	15
		Nickel	7440-02-0	0.040	100*
		Mercury (CVAA)	7439-97-6	0.0002	2
		gamma-BHC	58-89-9	0.00005	0.2
		Heptachlor	76-44-8	0.00005	0.4
		Heptachlor epoxide	1024-57-3	0.00005	0.2
		Endrin	72-20-8	0.0001	2
		Methoxychlor	72-43-5	0.0005	40
		Endrin ketone	53494-70-5	0.0001	2
		Endrin aldehyde	7421-93-4	0.0001	2
		alpha-Chlordane	5103-71-9	0.00005	2
		gamma-Chlordane	5103-74-2	0.00005	2

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Method	Analytical Method	Analyte	CAS	Reporting Limit (mg/L)	Acceptable Limits (mg/L)
Microbiological	Pour Plate Method comparable to SM 9215B or other suitable validated method	Heterotrophic Plate Count	NA	1.0	MMCL
	Membrane Filter comparable to SM 9222D or other suitable validated method	Fecal Coliform	NA	1.0	MMCL
	Multi-tube comparable to SM 9221F or other suitable validated method	e. Coli	NA	1.0	MMCL

\*For contaminant limits in water requiring testing, as described earlier in this protocol, DPH used Massachusetts Maximum Contaminant Levels (MMCLs) as acceptable limits. For one metal (nickel) no MMCL exists, thus the MassDEP Office of Research and Standards Goal (ORSG) for nickel in drinking water of 100 mg/L was used as an acceptable limit.

*Please note that these Protocols are continually evaluated and revised based upon new scientific and industry information.*